Reply to Office Action of September 28, 2007

AMENDMENTS TO THE CLAIMS

Listing of Claims:

- 1. (Currently amended) A method for transformation of selection of transgenic potato plants comprising
 - i) transforming potato plant cells with an expression vector comprising
 - a) a promoter active in plants.[[;]]
 - b) operably linked thereto a DNA sequence encoding a protein with the biological activity of an AHA synthase resistant to inhibitors of potato plant wildtype AHA synthase.; and
 - c) operably linked thereto regulatory sequences which serve as transcription termination and/or polyadenylation signals in plants, <u>and</u>
 - d) a heterologous DNA sequence containing information that causes changes in the carbohydrate concentration or the carbohydrate composition of regenerated potato plants.
 - ii) selecting for AHA synthase inhibitor resistant cells using an imidazolinone type herbicide as a selection agent, and
 - iii) regenerating the resistant cells to transgenic plants <u>expressing the heterologous</u> <u>DNA sequence</u>,
 - wherein an antibiotic is not used as a selection agent for selecting the resistant cells.
- 2. (Currently amended) The method for transformation according to of claim 1, wherein the expression vector comprises the DNA sequence of comprises the nucleotide sequence of SEQ ID NO: 1.
- 3. (Currently amended) The method for transformation according to of claim 1, wherein the expression vector comprises a DNA sequence comprises selected from the group consisting of
 - a) a DNA sequence comprising the nucleotide sequence of SEQ ID NO: 1;
 - b) a DNA sequence comprising a nucleotide sequence which hybridizes to a complementary strand of the nucleotide sequence of a); and SEQ ID NO: 1, or

Docket No. 12810-00141-US

Application No.: 10/519,947 Amendment dated March 27, 2008

Reply to Office Action of September 28, 2007

e) b) a DNA sequence comprising a nucleotide sequence which is degenerate to the nucleotide sequence of a); SEQ ID NO: 1,

wherein the DNA sequence encodes a protein possessing AHA synthase activity and confers resistance to AHA synthase inhibitors.

- 4. (Currently amended) The method for transformation according to of claim 1, wherein the promoter is an AHA synthase promoter from *Arabidopsis thaliana* or a nos promoter.
- 5. (Currently amended) The method for transformation according to of claim 1, wherein the terminator is a AHA synthase terminator from *Arabidopsis thaliana* or a OCS terminator.
- 6. (Cancelled)
- 7. (Currently amended) The method for transformation according to of claim 1, wherein the imidazolinone type herbicide is (RS)-2-(4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl)-5-methoxymethylnicotinic acid.
- 8. (Cancelled)
- 9. (Currently amended) The plant expression vector according to claim 8 method of claim 1, wherein the heterologous DNA sequence encodes a peptide, protein, antisense-, sense-RNA, viral RNA or ribozyme.
- 10. (Cancelled)
- 11. (Currently amended) The plant expression vector according to claim 10 method of claim 1, wherein the heterologous DNA sequence contains information that causes increased production of amylopectin type starches.
- 12-19. (Cancelled)